

REMARKS

The rejections under 35 U.S.C. § 103(a) of Claims 1, 2 and 15 as unpatentable over U.S. 5,698,627 (Oguni et al) and Claims 1, 2 and 10-16 as unpatentable over U.S. 4,230,525 (Yamaguchi et al) in view of U.S. 6,379,497 (Sandstrom et al), are respectfully traversed. All of the present claims now have the limitations of Claim 3, not subject to the above rejections. Thus, they are moot. Accordingly, it is respectfully requested that they be withdrawn.

The rejection of Claims 3-9 and 17-20 under 35 U.S.C. § 103(a) as unpatentable over U.S. 5,204,173 (Canary)¹ in view of U.S. 6,187,430 (Mukoyoshi et al) and further in view of Sandstrom et al, is respectfully traversed.

The present invention is directed to molding base paper.

As described in the specification under "Background of the Invention," beginning at page 1, line 6, packing vessels for industrial products or the like, such as for keeping foods fresh, are frequently made out of plastic, which material is disadvantageous to the environment when discarded. To solve these problems, 3-dimensional moldings made of pulp only or a material mainly comprising pulp have been used for this purpose, but processes for making these materials, and the materials themselves, have been problematical. The present invention addresses the problems of the prior art.

As recited in Claim 3, the presently-claimed invention is a molding base paper comprising a high density layer and a low density layer, wherein said high density layer has a density of 0.7 to 0.9 g/cm³ and said low-density layer has a density of lower than 0.7 g/cm³, and wherein said base paper has a basis weight of 100 to 500 g/cm² and a density of 0.4 to 0.7 g/cm³.

Canary discloses a laminated paperboard comprising at least a ply comprising two layers. However, the two layers of the ply in Canary have the same density of about 0.4 and

¹ Canary has not been made of record. The Examiner is respectfully requested to list Canary on a Notice of References Cited, Form PTO-892, and include a copy thereof with the next Office communication.

0.5 g/cm³ (column 3, lines 35-48) and accordingly, the ply does not have the high density layer of 0.7 to 0.9g/cm³ of the present invention. Although Canary states that the two-ply materials can be caused to attain variations in density (column 4, lines 11-16), the variations in density are provided in areas of the product, not in layers. See also 4th paragraph of column 4, wherein the first ply A' is laid centrally over the ply B' and the plies are joined together at an interface C', the plies being compressed during the joining so that the product has a substantially uniform thickness across its entire width. Accordingly, the central area of the two ply product has a significantly higher density than that of the outside areas. See also Fig. 5A, the portion indicated by A', which portion or area has a high density due to the compression. In addition, Canary neither discloses nor suggests that the combination of the two layers having the specific different high and low densities can be useful for a deep drawing method.

Mukoyoshi et al is directed to an ink jet recording sheet. Mukoyoshi et al neither discloses nor suggests a substrate composed of two layers having specific different high and low densities, nor suggests that the substrate can be useful for a deep drawing method. Furthermore, the coating of the ink jet recording sheet of Mukoyoshi et al is a polymer coating, not a paper sheet.

Sandstrom et al discloses a bulk enhanced paper board and shaped products made therefrom. Sandstrom et al discloses the fiber mat density of their fiber board as 3 to 9 pounds per 3,000 square foot ream at a fiber board thickness of 0.001 inch (paragraph bridging columns 5 and 6). This value corresponds to 0.193 to 0.578 g/cm³. Therefore, the paperboard of Sandstrom et al does not contain the above-recited high-density layer whose density is 0.7 to 0.9 g/cm³. Indeed, Sandstrom et al neither discloses nor suggests the combination of high-density and low-density layer of the present claims. As described in the

specification at page 15, lines 14-18, by so combining a low-density layer and a high-density layer, the resultant base paper meets the conditions (1) to (4) of Claim 21.

In sum, Applicants respectfully submit that one of ordinary skill in the art would not have combined the above-discussed references as the Examiner has. Moreover, even if these references were combined, the result would not be the presently-claimed invention.

For all the above reasons, it is respectfully requested that the rejection over Canary in view of Mukoyoshi et al and Sandstrom et al, be withdrawn.

Submitted herewith is an Information Disclosure Statement. The Examiner is respectfully requested to initial the Form PTO-1449 submitted herewith, and include a copy thereof with the next Office communication.

All of the presently pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
NFO:HAP/bu

Harris A. Pitlick
Registration No. 38,779